



# Friends from Across the Aisle: The Effects of Partisan Bonding, Partisan Bridging, and Network Disagreement on Outparty Attitudes and Political Engagement

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## Abstract

Research on the influence of social networks on political behavior has led to findings showing an apparent trade-off between positive attitudes toward the outparty and political engagement. The prevalent sentiments have been that partisan bonding or ties with fellow partisans hurts evaluations of the outparty but helps political engagement. Partisan bridging or ties with opposite partisans, on the other hand, improves evaluations of the outparty but hurts engagement. I argue that this trade-off is essentially an illusion driven by a mistaken assumption that bonding and bridging are two opposite ends of the same continuum. Analyzing two original national surveys of the American public, I show that bonding and bridging are independent constructs with different consequences. Consistent with previous studies, I find that bonding hurts and bridging helps outparty attitudes. Both bonding and bridging, however, are positively related to political engagement. I also show that network disagreement partially mediates the effects of partisan bonding, but not the effects of partisan bridging. This suggests that the efforts to encourage voters to build relationships with politically different others can be done without having to worry that they will lead to decreased engagement.

**Keywords** Social network · Partisan bonding · Partisan bridging · Inparty ties · Outparty ties · Political engagement · Outparty attitudes

Various studies have used the terms partisan bonding (ties with fellow partisans), partisan bridging (ties with opposite partisans), and network disagreement

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interchangeably or taken as given that they are strongly related to each other (e.g., Lupton and Thornton 2017; Mutz 2002a). These studies assume that partisan bonding and bridging are two opposite ends of the same continuum. As one increases, the other has to decrease. They also treat partisan bonding and bridging as similar to or strongly related to the level of disagreement in one's discussion network.

These conceptualizations have led to an apparent trade-off between positive outparty attitudes and political engagement. Partisan bridging leads to more positive outparty attitudes by increasing network disagreement and exposing individuals to diverse viewpoints (Mutz 2002b; Pattie and Johnston 2008). At the same time, partisan bridging and network disagreement lower political engagement by inducing ambivalence or by putting social pressures on the individuals and discouraging them from being politically active so as not to offend their politically different significant others (McClurg 2003; Mutz 2002a). One's social network may enable one to be participatory or tolerant, but not both.

I argue that this trade-off is essentially an illusion and propose three arguments concerning how partisan bonding, partisan bridging, and network disagreement are related to each other and to outparty attitudes and political engagement. First, I argue that partisan bonding and bridging are different constructs that do not have to be strongly correlated. Having more ties with fellow partisans does not necessarily lead to fewer ties with identifiers of the opposite party and vice versa. Second, I argue that partisan bonding and bridging are different from network disagreement. Partisan bonding and bridging are about social ties whereas network disagreement is about content of interaction. Consequently, the effects of partisan bonding and bridging on political attitudes and behavior should not be reducible to the effect of network disagreement. Third, I argue that partisan bonding should be negatively related, and partisan bridging positively related, to outparty attitudes. Both higher bonding and higher bridging, however, should be positively related to higher levels of political engagement. Additionally, I expect network disagreement to be positively related to outparty attitudes and negatively to political engagement, further underlining how network disagreement is different from bonding or bridging.

I support these arguments by fielding two original national surveys that employed a novel measurement of bonding and bridging. This measurement strategy diverges from earlier studies in two ways. First, it measures bonding and bridging as two separate constructs, as opposed to two opposites of the same continuum. Second, the strategy treats network disagreement as different from partisan bonding and bridging, explicitly measuring it as the extent to which an individual has different views than their discussants.

The following sections develop these arguments and explain how they contribute to the literature. I first discuss how existing studies conceptualize and measure bonding and bridging and hypothesize how the two constructs should relate to outparty attitudes and political engagement. I then contrast bonding and bridging to network disagreement and outline my expectations on how network disagreement should relate to outparty attitudes and political engagement.

## Partisan Bonding and Partisan Bridging

The scholarly interest on the influence of social environment on political behavior and attitudes has a long history (e.g., Berelson et al. 1954). The social environment, in turn, needs to be distinguished into social networks and social contexts (Campbell 2013). Social networks refer to the connections that an individual has with significant others, whereas social contexts refer to the broader social environments such as states and cities. While social contexts can also affect behavior and attitudes (Campbell 2006), this study concerns itself with social networks, specifically the effects of partisan bonding and bridging.

I define partisan bonding and partisan bridging as relationships with identifiers of the inparty (fellow partisans) and identifiers of the outparty (opposite partisans), respectively.<sup>1</sup> Both are measured on the individual level, which means that this study diverges from several other studies that measure bonding and bridging as community- or organizational-level attributes (Agnitsch et al. 2006; Geys and Murdoch 2010; Kim et al. 2006).

There are at least three methods that scholars have used to operationalize or measure individual-level social networks, including the extent of one's bonding or bridging relationships: global estimates, name generators, and randomized experiments. In a global estimate approach, respondents indicate how many of their social ties meet a specific criterion. For example, respondents may be asked how many of their friends share their religion or party preference. In a name generator procedure, respondents are asked to list the names of people with whom they have had discussions on "politics" or "important matters" (Klofstad et al. 2009) within a specific period, followed by questions related to the discussants' characteristics such as party affiliations, genders, or how often the respondent disagrees with them. While not tapping into as personal relationships as ones measured with a global estimate or a name generator, several studies use random assignments to examine the effects of social ties on political attitudes or behavior (Klar 2014; Levendusky et al. 2016). In this approach, participants are randomly assigned into groups whose members' political preferences are either similar to or different from that of the participant's.

A limitation of these approaches as they are commonly used is that they would measure bonding and bridging as if they were situated in a zero-sum situation (Erisen and Erisen 2012, p. 848; Klofstad et al. 2013, p. 125; Mutz 2002a, p. 853; Nir 2005, p. 429). This, in turn, implies that as an individual has more inparty ties she would inevitably have fewer outparty ties. In a global estimate approach, for example, Putnam and Campbell (2010) create a bridging measure by reverse-coding a bonding question ("Thinking about your five closest friends, how many of them have the same religious affiliation as you?").

A notable exception is Eveland and Hively (2009; also see Valenzuela et al. 2012) who distinguish between safe discussion, dangerous discussion, and

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<sup>1</sup> Other names for partisan bonding and bridging would be intraparty and interparty ties, respectively. I prefer to use the term bonding and bridging to better situate and relate the present study to the study of social networks and their influence on political behavior.

diversity of discussion. They measure safe discussion as the frequency of discussion with others who share the respondent's partisanship and dangerous discussion as the frequency of discussion with others who do not share the respondent's partisanship. They find that both variables are positively and significantly correlated ( $r=0.44$ ) but have different effects on political participation. Safe discussion increases participation, but dangerous discussion has no effect. The present study, however, is different from Eveland and Hively's as it examines social ties as opposed to the frequency of political discussion.

It is a mistake to assume that partisan bonding and bridging are perfect opposites of each other. There is no theoretical reason why bonding and bridging should be antagonistic. As Putnam (2007, p. 144) notes, "high bonding might well be compatible with high bridging, and low bonding with low bridging." This argument is also bolstered by studies on the community level that examine the two constructs. These studies show that, while they can be related, bonding and bridging are different constructs and have different effects (Agnitsch et al. 2006; Kim et al. 2006).

**Hypothesis 1** Partisan bonding and bridging are different constructs and do not have to be strongly correlated.

The next question is: How do partisan bonding and bridging affect outparty attitudes and political engagement? Related to outparty attitudes, I expect partisan bonding to have negative effects on the evaluations of the outparty. Having friends who share one's partisanship likely facilitates the flow of information that is favorable to the inparty and unfavorable to the outparty (Huckfeldt et al. 2004b). Employing an experimental design, Klar (2014) shows that individuals in politically homogeneous groups exhibit more motivated reasoning. Ties with inparty identifiers may also enhance partisan identity, which can lead to partisan bias (Levendusky et al. 2016).

On the other hand, I expect partisan bridging to be positively related to outparty attitudes. Studies on the contact hypothesis (Allport 1954; Cigler and Joslyn 2002; Pettigrew and Tropp 2006, 2008; Putnam and Campbell 2010) find that relationships with outgroup members lead to increased positive feelings and tolerance toward the outgroup. Politically diverse social networks are also found to lead to higher tolerance in Japan (Ikeda and Richey 2009) and Britain (Pattie and Johnston 2008, p. 691). Ben-Nun Bloom and Bagnio-Moldavsky (2015) find a similar effect in Israel and extend the findings to show that exposures to diverse opinions in social networks lead to increased tolerance only among the open minded. Ties with politically different others also moderate the effects of partisanship on candidate evaluations (Lupton et al. 2015). The influence of partisanship is distinctively weaker among respondents whose discussants are favoring a different candidate than themselves.

**Hypothesis 2A** Partisan bonding should be negatively related to outparty attitudes.

**Hypothesis 2B** Partisan bridging should be positively related to outparty attitudes.

I expect both partisan bonding and partisan bridging to be positively related to political engagement. Ties with fellow partisans may encourage engagement (Eveland and Hively 2009) through opinion validation in which attitudinally similar others serve as social evidence for the correctness of one's attitudes (Byrne 1962, p. 165) or through recruitment in which people are asked to participate by their fellow partisans (Verba et al. 1995). Partisan bridging might have the same effect by stimulating conversations (Scheufele et al. 2004) and motivate individuals to learn about different viewpoints, gaining knowledge in the process. Political knowledge, in turn, is a strong correlate of political engagement (Galston 2001). Furthermore, Huckfeldt et al. (2004b, p. 88) find that both the number of discussants who share one's political preference (bonding) and the number of discussants who do not (bridging) are positively related to one's level of political interest.

**Hypothesis 3** Partisan bonding and bridging should be positively related to political engagement.

That partisan bridging is expected to be positively related to political engagement is somewhat different from some existing findings. Employing a name generator procedure, Mutz (2002b, 2006; also see Campbell 2008; McClurg 2003) finds that individuals who have discussants with different political preferences have lower levels of political engagement. These individuals took longer to decide on their presidential vote choice, were less likely to vote in the election, and experienced more attitudinal ambivalence.

Klofstad et al. (2013) distinguish between general and partisan disagreement. General disagreement refers to the respondent's disagreement with her discussants on general political issues, whereas partisan disagreement relates to the discrepancy in partisanship between the respondent and her discussants. They find that both conceptualizations have different effects on participation, but the statistically significant effects are all negative (p. 132). Pattie and Johnston (2009) find as well that disagreements with political discussants depress turnout.

I argue that two factors explain this divergence between the present study's predictions and the past studies' findings. First, the existing studies mostly treat bonding and bridging as perfect opposites. Treated this way, if bonding is positively related to political engagement, then bridging has to be negatively related to it. As I have argued above, bonding and bridging are different constructs and they do not

have to be strongly correlated.<sup>2</sup> Second, the existing studies largely equate bridging to network disagreement or include the former as a component of the latter.

## Network Disagreement

In addition to being different from each other, partisan bonding and bridging are also different from network disagreement. Partisan bonding and bridging concern relationships, whereas network disagreement concerns the content of communication. Unfortunately, existing studies have overlooked this distinction, assuming a strong correspondence between ties with inparty and outparty identifiers on the one hand and network disagreement on the other. For example, Mutz (2002a) includes in her scale of network disagreement a question that asked about the discussant's partisanship, which was then coded as similar to the respondent's, different, or neither. Another example would be Klostad et al. (2013). They measured their partisan disagreement variable as an average of the absolute differences between the respondent's party ID and that of her discussants. A more recent study (Lupton and Thornton 2017) also defines disagreement as having ties with discussants who voted for a different presidential candidate. These studies illustrate how scholars have assumed that partisan bonding or bridging are tightly related to, if not interchangeable with, network disagreement.

I argue that this assumption is mistaken. Partisan bonding and bridging are not the same as network disagreement and their effects on political behavior or attitudes cannot be reduced to the effects of network disagreement. Having ties with politically different others (bridging) does not necessarily mean disagreement. Disagreement only emerges to the extent that two individuals or parties in a relationship take different positions on an issue and communicate their positions. In other words, disagreement is a cognitive experience while bridging is a relational description. Disagreement is a cognitive experience because it involves arguments and exchanges of views. Bridging is a relational description because it is about whom one is connected to socially. Bridging provides an "ingredient" for disagreement, but it is not the disagreement itself. As such, the present study encourages scholars to be more

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<sup>2</sup> One might think that the assumption that bonding and bridging are inversely correlated is at least justifiable by intuition. Let us consider a global estimate scenario where a respondent is asked about how many of her friends share her partisanship with answers ranging from one (none) to four (a lot). The intuitive argument would have gained traction had the respondent answered the question by first reconstructing her whole network, counting her bonding friends, and then choosing one answer that best reflects that count. While few people might do that, our respondent is more likely to engage in a bottom-up approach by implicitly enumerating friends who share her partisanship or simply relying on impression. This opens up the possibility of forgetting (Bell et al. 2007) and heuristic reasoning (Tversky and Kahneman 1973). Since the whole network itself is never fully constructed, its size cannot be treated as finite and it would be improper to calculate the number of bridging friends as the reverse of the number of bonding friends (five minus the chosen answer). Similarly, the finite set argument also may not work well with a name generator approach for various reasons, such as selective naming of discussants (Bell et al. 2007; Marsden 2003; Shea et al. 2015) and measurement errors caused by artificially constraining the size of respondents' networks (Marin 2004, p. 289).

attentive to the distinction between “having ties that make disagreeing more likely” and “actually disagreeing with someone”.

That partisan bonding, bridging, and network disagreement are different should be evidenced by their relationships to each other and to our dependent variables of interest (outparty attitudes and political engagement). Rather intuitively, I expect higher partisan bonding or more ties with fellow partisans to lead to lower network disagreement and higher partisan bridging or more ties with politically different others to lead to higher network disagreement. It is reasonably easier to disagree with others who do not share one’s political views than with like-minded others.

**Hypothesis 4A** Partisan bonding should be negatively related to network disagreement.

**Hypothesis 4B** Partisan bridging should be positively related to network disagreement.

When it comes to how one perceives the other party, I expect network disagreement to be positively related to outparty attitudes. Disagreeing with others on political issues may expose individuals to diverse viewpoints (Mutz 2002b). Such an exposure may also decrease the likelihood of the individual believing that their view is the only legitimate one, especially if the disagreement happens within the context of significant personal relationships (Lazer et al. 2010).

How is it different from the effect of partisan bridging, then? I argue the difference lies more in the cognitive emphasis of network disagreement. Just like network disagreement, partisan bridging may also expose individuals to different political views. Unlike network disagreement, however, the exposure that happens within the context of bridging would be less (if at all) adversarial and positive outparty attitudes that result from partisan bridging would be driven less by cognitive mechanisms than psychological changes. A meta-analysis by Pettigrew and Tropp (2008) supports this argument. They find that positive effects of bridging relationships on outgroup attitudes are driven more by psychological processes, such as increased empathy toward the outgroup, than cognitive mechanisms, such as increased knowledge about the outgroup.

**Hypothesis 5** Network disagreement should be positively related to outparty attitudes.

Related to political engagement, contrary to the effect of partisan bridging, I expect network disagreement to lead to lower political engagement. This expectation is consistent with the findings of many previous studies (e.g., Campbell 2008; Klofstad et al. 2013; Mutz 2002a). *Actually disagreeing* with others in the network (not merely having ties with politically different others) creates a social accountability pressure (Mutz 2006). In such a situation the individual has to face the possibility that her actions or positions could offend her significant others and threaten her relationships with them. The potency of such interpersonal tensions in persuading

individuals to be less politically engaged is also evidenced by research showing that individuals who are more aversive to interpersonal conflict are less likely to be politically active (Ulbig and Funk 1999).

**Hypothesis 6** Network disagreement should be negatively related to political engagement.

At this point one might wonder if it is not paradoxical that partisan bridging and network disagreement are predicted to be positively correlated (Hypothesis 4B) yet have different effects on political engagement (Hypotheses 3 and 6). The answer lies in our conceptualization of partisan bonding, partisan bridging, and network disagreement. As outlined above, the three constructs are different from each other. Partisan bridging does not have to lead to network disagreement and partisan bonding does not eliminate network disagreement (Huckfeldt et al. 2004a, b).

This means that the effects of partisan bonding and bridging on outparty attitudes and political engagement should hold up even after taking into account the effects of network disagreement. As a corollary, that bridging may have its own effect on political engagement independent of the effect of disagreement means that partisan bridging can *directly* exert a positive effect on political engagement while still *indirectly* exert a negative effect by increasing network disagreement, hence resolving our seemingly paradoxical Hypotheses 3, 4B, and 6.

**Hypothesis 7** The effects of partisan bonding and bridging on outparty attitudes and political engagement should hold up even after accounting for the effect of network disagreement.

## Data

To my knowledge, no publicly available survey data exist, in which partisan bonding and bridging are measured explicitly and separately. I therefore analyzed two original surveys of Americans older than 18 years old fielded in July of 2017.<sup>3</sup> The first is a survey on the American Dream (N=1550). Respondents were procured from Qualtrics and the sample was balanced by gender and age with 82.8% completion rate. The second survey is a study on Democratic Virtues. YouGov as the cooperating agency interviewed 2130 respondents who were then matched down to a sample of N=2000 based on a sampling frame constructed from the full 2010 American Community Survey sample. YouGov then employed propensity score models to produce a final dataset that includes a sampling weight to make it representative of the American population.

Both surveys fielded the same questions tapping into the independent variables (partisan bonding and bridging) but included different measures of the dependent

<sup>3</sup> Data and code can be accessed at Dataverse: <https://doi.org/10.7910/DVN/GZRCCJ>.

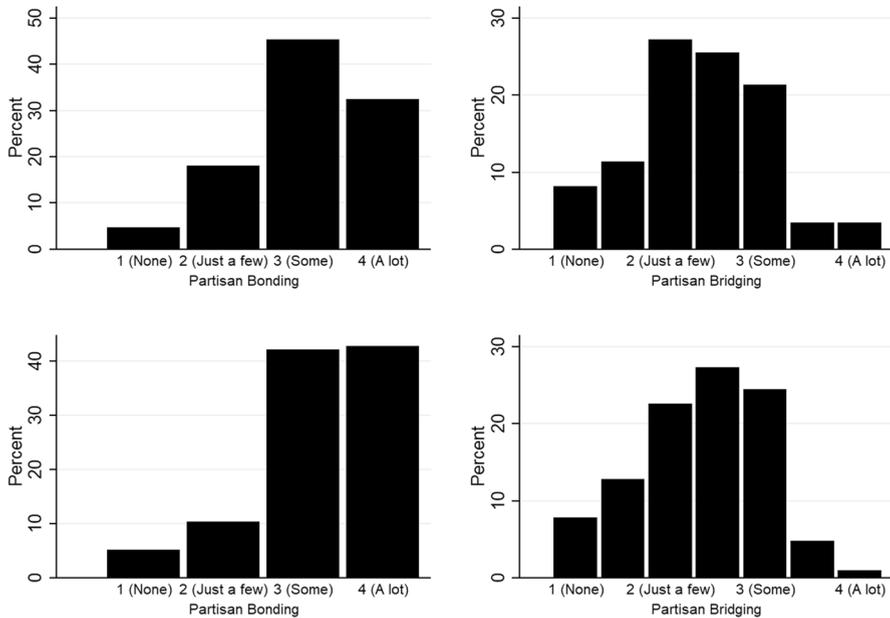
variables, which enabled them to complement each other. The American Dream study focuses on feelings toward the outparty and outparty candidate, traits perception of opposite partisans, political interest, political discussion, and political efficacy. The Virtues study focuses on willingness to interact with opposite partisans, political interest, and political discussion. This focus on non-partisan measures of political engagement (political interest, political discussion, and political efficacy) is in part an effort to avoid partisan difference in the levels of partisan engagement such as voting or online activity (Conover et al. 2012; Gomez et al. 2007). Furthermore, political interest may be seen as a foundation for other forms of engagement and political behavior (Prior 2010, p. 747). In addition to these variables, the Virtues study also included questions that tap into network disagreement.

Given the nature of the independent and dependent variables that requires information about which party each respondent considered their inparty or outparty, my analysis excludes Independents (those who chose “4” on the standard 7-point party ID scale). I treated leaners (those who answered “3” or “5” on the party ID scale) as partisans and included them in the analysis as studies suggest that leaners behave just like partisans do (Keith et al. 1992; Petrocik 2009).

## Independent Variables

Partisan bonding and partisan bridging were calculated from three questions that asked the respondent “How many of your friends are [Democrats/Republicans/Independents]?” Responses ranged from “none of them” (score of one) to “a lot of them” (score of four). Partisan bonding was calculated simply from the friendship question that asked how many of the respondent’s friends shared her partisanship. For example, if the respondent was a Democrat, then her response to “How many of your friends are Democrats?” would define her partisan bonding score. Partisan bridging was calculated by averaging the responses to the other two questions. In regard to our Democratic respondent, her measure of partisan bridging would be the average of “How many of your friends are Independents?” and “How many of your friends are Republicans?” Excluding how many friends are Independents from the calculation of partisan bridging does not substantively change the findings and the analysis is available in the Online Appendix.

Figure 1 presents the histograms of partisan bonding and bridging from both surveys. Conforming to the findings on network homophily (McPherson et al. 2001), the majority of the respondents reported that between “some” and “a lot” of their friends share their partisanship. The histograms of partisan bridging, on the other hand, are somewhat closer to the normal distribution with the means equal to 2.32 (the American Dream study) and 2.30 (the Virtues study), which are between “just a few” and “some”. This conforms to what we know about the persistence of diversity in social networks—that despite the tendency to affiliate with similar others people still maintain relationships with the different others (Huckfeldt et al. 2004a). I also find that partisan bonding and bridging are only weakly correlated and share less than 3.5% of their variance ( $r = -0.0155$ , *n.s.* for the American Dream study and



**Fig. 1** Histograms of partisan bonding and partisan bridging from the American Dream study (upper) and the Virtues study (lower)

$r=0.18$ ,  $p<0.01$  for the Virtues study), which provides another evidence that bonding and bridging should not be treated as perfect opposites.<sup>4</sup>

## Control Variables

To get a cleaner estimate of the effects of bonding and bridging on outparty attitudes and political engagement, I included in all the models an extensive set of control variables. The standard demographic control variables include gender, age, education, income, religion, and race. I also controlled for the respondent's party ID strength and a dummy for Republicans. Party ID strength was measured by folding

<sup>4</sup> Measuring bonding and bridging using a global estimate approach, in turn, means that I cannot assess the effects of dyadic interactions and have to focus on the effects of the whole network. This constraint should not undermine the conclusions of the present study. This is because focusing on dyads or on an artificially constrained network might underestimate the effects of social relationships on political behavior (Eveland et al. 2013). Furthermore, dyadic interactions also have to be understood in the context of overall interactions within the network. As Huckfeldt et al. (2004a, b, p. 54) note, "The consequences of dyadic information flows are conditioned on the remainder of the individual's network." This is, of course, not to say that the effects of dyadic interactions can or should be reducible to the effects of the whole network. Future study will benefit from exploring the effects of bonding or bridging from a dyadic perspective, for example by interviewing both the respondent and the discussant (e.g., Huckfeldt et al. 2004a, b).

the standard 7-point scale at its midpoint. It is possible that those who are more strongly attached to their parties have stronger opinions about the outparty and are more politically engaged. The dummy for Republicans (with Democrats as reference group) was intended to capture the possibility of party asymmetry in partisan attitudes (Ura and Ellis 2012).

### **A Note on Causation**

The present study analyzes observational data and, as in any analysis of such data, the possibilities of self-selection and endogeneity demand further discussion. One could argue that any relationships between bonding, bridging, and disagreement on the one hand and outparty attitudes or political engagement on the other are driven by self-selection where individuals with certain political views select their friends based on those views. If that is the case, instead of partisan bridging leading to more positive outparty evaluations, for example, it could be that those with more positive views of the outparty are more likely to have outparty friends in the first place.

While self-selection feels intuitive, previous research shows that it cannot constitute the whole story. Studies that employed experimental or longitudinal data find that social networks shape attitudes more than the other way around (Green and Wong 2008; Putnam and Campbell 2010; Van Laar et al. 2005). Examining the evolution of networks-attitudes in a whole network setting, Lazer et al. (2010) remark that “We find significant conformity tendencies: Individuals shift their political views toward the political views of their associates... We also find that political views are notably unimportant as a driver for the formation of relationships” (p. 148).

The possibility that self-selection alone would drive the results is further reduced when one considers the often limited control one has over one’s social environment. Regardless of one’s attitudes or predispositions, one’s social environments (e.g., workplace, neighborhood, school) have only a limited supply of individuals with certain characteristics, thus limit whom one can selectively befriend. Huckfeldt and Sprague (1987), noticing this constraint one experiences when forming one’s social network, write that “People choose their friends and the content of their conversations, but each of these choices is, in turn, bounded by an environment that, for many purposes, must be taken as given (p. 1197).” In short, self-selection might matter, but it cannot be the only factor that is driving the relationships between bonding, bridging, and network disagreement on the one hand and outparty attitudes and political engagement on the other.

## **The American Dream Study**

### **Outparty Attitudes**

Attitudes toward the outparty were measured using three sets of questions: feeling thermometer of the outparty, feeling thermometer of the outparty presidential

candidate in the 2016 election, and traits evaluation of the outparty identifiers. Feeling thermometers of the outparty and the outparty candidate were presented in a standard way where respondents were asked to indicate how they felt about various groups or individuals “that have been in the news recently.” Possible responses ranged from zero to one hundred with higher scores indicate warmer feelings.

To measure traits evaluation, I asked respondents to indicate how true they considered two positive traits (cooperative and honest) and two negative traits (greedy and conceited) were in describing the opposite partisans (Zhong et al. 2008). Possible responses ranged from one (“never true”) to five (“always true”). I calculated a positivity score of the outparty identifiers by averaging the respondent’s answers on the positive items for the outparty partisans (Cronbach’s  $\alpha=0.82$ ). The items load unidimensionally onto a single factor that explains 85% of the variance (the eigenvalues are 1.70 and 0.30). I did the same for the negative items to create a negativity score (Cronbach’s  $\alpha=0.75$ ). The negative items also load unidimensionally onto a single factor that explains 80% of the variance (the eigenvalues are 1.61 and 0.39). From these scores, I calculated a net outparty score by subtracting the negativity score from the positivity score. For example, among Democrats, I calculated the net outparty score as  $(positivity\ score)_{Republicans} - (negativity\ score)_{Republicans}$ . Predicting the outparty positivity and outparty negativity scores separately does not substantively change the results and is available in the Online Appendix.

## Political Engagement

As measures of political engagement, I asked questions that tapped into political interest, political efficacy, and frequency of political discussion. Political interest was measured by asking respondents to indicate how interested they were “in information about what is going on in government and politics.” Possible answers ranged from one (not interested at all) to five (extremely interested). Political efficacy was operationalized as an average of two items: “How much do government officials care what people like you think?” and “How much people like you can affect what the government does?” Possible answers ranged from “not at all” (score of one) to “a great deal” (score of five). Lastly, frequency of political discussion is based on a question that asked respondents “During a typical week, how many days do you talk about politics with family or friends?” with answers ranging from zero to seven.

## Results

Table 1 presents results from the regressions of outparty attitudes and political engagement on partisan bonding and bridging. The results largely conform to the expectations. Partisan bonding has negative effects on the attitudes toward the outparty. Having more friends who share one’s partisanship is related to more negative feelings toward the outparty and outparty candidate and a more negative view of the opposite partisans. Partisan bridging, on the other hand, is related to more positive feelings toward the outparty and outparty candidate and a more positive view of the outparty identifiers. At the same time, both partisan bonding

**Table 1** Regressions of outparty attitudes and political engagement, the American Dream study

	Outparty feeling	Outparty candidate feeling	Net outparty traits	Political interest	Political efficacy	Political discussion
Partisan bridging	10.162*** (1.07)	10.184*** (1.11)	0.451*** (0.06)	0.318*** (0.05)	0.381*** (0.04)	0.402*** (0.09)
Partisan bonding	- 3.962*** (0.96)	- 4.032*** (0.99)	- 0.283*** (0.06)	0.249*** (0.04)	0.154*** (0.03)	0.484*** (0.08)
Female	- 0.590 (1.40)	- 4.801*** (1.45)	- 0.085 (0.08)	- 0.234*** (0.06)	- 0.161** (0.05)	- 0.237+ (0.12)
Age	- 0.316*** (0.04)	- 0.258*** (0.05)	- 0.014*** (0.00)	0.009*** (0.00)	- 0.007*** (0.00)	0.008* (0.00)
Education	- 0.746 (0.56)	- 1.190* (0.57)	- 0.015 (0.03)	0.094*** (0.02)	0.060** (0.02)	0.178*** (0.05)
Income	0.543* (0.24)	0.565* (0.25)	0.014 (0.01)	0.024* (0.01)	0.004 (0.01)	0.041+ (0.02)
Religion: catholic	1.889 (1.85)	5.037** (1.92)	0.054 (0.11)	0.070 (0.08)	0.062 (0.07)	- 0.010 (0.16)
Religion: others	2.477 (2.47)	2.567 (2.55)	0.090 (0.14)	0.045 (0.11)	0.114 (0.09)	0.148 (0.22)
Religion: none	- 7.577*** (1.77)	- 5.734** (1.83)	- 0.230* (0.10)	0.048 (0.08)	- 0.127* (0.06)	0.012 (0.16)
Non-white	2.482 (1.74)	5.823*** (1.80)	0.041 (0.10)	- 0.041 (0.08)	0.315*** (0.06)	- 0.110 (0.15)
PID Strength	- 1.483 (1.09)	- 0.426 (1.13)	- 0.097 (0.06)	0.315*** (0.05)	0.287*** (0.04)	0.400*** (0.10)
Republican dummy	0.550 (1.53)	0.444 (1.58)	0.122 (0.09)	0.081 (0.07)	0.127* (0.06)	0.057 (0.13)
Intercept	34.149*** (5.62)	22.563*** (5.84)	- 0.612+ (0.32)	0.428+ (0.25)	0.425* (0.20)	- 1.618** (0.49)
N	1281	1280	1288	1289	1289	1278
R-square	0.163	0.157	0.113	0.168	0.191	0.103

\*\*\*p < 0.001, \*\*p < 0.01, \*p < 0.05, +p < 0.10

and bridging have positive effects on the three measures of political engagement. Both having friends who share one's partisanship and having friends who do not share one's partisanship are related to higher political interest, higher sense of political efficacy, and more political discussion.

Related to effect size (see Table A6 in the Online Appendix), I find that the positive effects of bridging on feelings toward the outparty (partial- $\eta^2=0.066$ ), on feelings toward outparty candidate (partial- $\eta^2=0.062$ ), and on outparty traits evaluation (partial- $\eta^2=0.040$ ) are stronger than the negative effects of bonding (partial- $\eta^2=0.013$ , 0.012, and 0.02, respectively) and that the differences are statistically significant. The effect of bridging (partial- $\eta^2=0.069$ ) is also stronger than bonding (partial- $\eta^2=0.015$ ) when it comes to political efficacy. There is no difference in the magnitudes of the effects of bridging and bonding on political interest and discussion. The generally stronger effects of bridging mean that building outparty ties can potentially offset the negative consequences of inparty ties on how one perceives the other party and at the same time contribute to one's level of political engagement.

## The Democratic Virtues Study

The preceding analysis of the American Dream survey shows not only that partisan bonding and bridging can be measured separately, but also that they have different effects on outparty attitudes. These findings would not have been captured had bonding and bridging been measured using a zero-sum measure as most studies have done. The analysis, however, could not test whether the effects of social relationships are independent from the effects of communication content or disagreement, a variable that scholars have been interested in. The Democratic Virtues study was fielded in part to test this hypothesis that social relationships have a unique influence on outparty attitudes and political engagement that is independent of the effects of network disagreement.

### Outparty Attitudes

Attitudes toward the outparty in the Virtues study are operationalized as a composite score of four questions tapping into the respondent's willingness to interact with the opposite partisans. The questions asked how comfortable the respondents would be with living next door to, working with, having dinner with, and having their child marrying someone who was a Democrat (for Republican respondents) or a Republican (for Democratic respondents). These questions load onto a single dimension that explains 86% of the variance (the eigenvalues are 3.45, 0.30, 0.14, and 0.10). I averaged the respondent's answers across the four questions to create an outparty attitudes measure (Cronbach's  $\alpha=0.94$ ).

## Political Engagement

As measures of political engagement, I asked questions that tapped into political interest and frequency of political discussion. Political interest was measured by asking respondents to indicate how interested they were “in information about what is going on in politics and public affairs”. Possible answers ranged from one (not interested at all) to five (extremely interested). Frequency of political discussion was calculated as an average of five questions that asked each respondent, on a 6-point scale ranging from “never” to “nearly every day”, how often they talked about politics in person with their spouse, family members, friends, coworkers, and people at church (Cronbach’s  $\alpha=0.66$ ). These questions load unidimensionally onto a single dimension that explains about 45% of the variance (the eigenvalues are 2.23, 0.90, 0.82, 0.67, and 0.38).

## Network Disagreement

Network disagreement was measured as an average of five questions that asked respondents to indicate how often they disagree with their spouse, family members, friends, coworkers, and people at church when discussing politics (Cronbach’s  $\alpha=0.71$ ). Responses were coded as a 3-point scale representing “more often agree”, “agree and disagree about equally”, and “more often disagree”. These questions load onto a single factor that explains 52% of the variance (the eigenvalues are 2.62, 0.71, 0.68, 0.53, 0.45). Higher scores represent higher network disagreement.

## Results

Table 2 presents the results from regression models predicting the dependent variables and network disagreement. Three patterns are evident. First, the primary relationships documented in Table 1 all hold up even when disagreement is included.<sup>5</sup> Partisan bonding is negatively related to the willingness to interact with opposite partisans (partial- $\eta^2=0.016$ ) and positively to political interest (partial- $\eta^2=0.024$ ) and political discussion (partial- $\eta^2=0.039$ ). Partisan bridging, on the other hand, is positively related to all of the dependent variables (partial- $\eta^2=0.068$  on outparty interaction, partial- $\eta^2=0.029$  on political interest, and partial- $\eta^2=0.058$  on political discussion). Consistent with findings from the American Dream study that highlight the primacy of partisan bridging, the effects of partisan bridging on outparty interaction and political discussion are significantly stronger than that of partisan bonding.

<sup>5</sup> A notable difference is that PID strength is now positively related to the measure of outparty attitudes. This is likely because the measure taps into a behavioral intention (willingness to interact with opposite partisans). As studies on attitude-behavior connection show, actual behavior or behavioral intention is often more onerous than merely holding attitudes as it requires a higher degree of motivation (Ajzen and Fishbein 1977). As such, the measure may differentiate strong and weak partisans better than measures of attitudes used in the American Dream study.

**Table 2** Regressions of outparty attitudes and political engagement, the democratic Virtues study

	Outparty interaction		Political interest		Political discussion		Network disagreement
	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2	
	Partisan bridging	0.414*** (0.07)	0.385*** (0.06)	0.280*** (0.07)	0.248*** (0.07)	0.514*** (0.07)	
Partisan bonding	-0.157** (0.06)	-0.186*** (0.05)	0.162* (0.07)	0.107+ (0.07)	0.277*** (0.06)	0.180** (0.06)	-0.172*** (0.03)
Female	-0.016 (0.08)	-0.016 (0.07)	-0.458*** (0.09)	-0.440*** (0.08)	-0.433*** (0.09)	-0.437*** (0.08)	0.074+ (0.04)
Age	0.008*** (0.00)	0.008*** (0.00)	0.010*** (0.00)	0.010*** (0.00)	-0.005+ (0.00)	-0.006* (0.00)	-0.002 (0.00)
Education	0.029 (0.03)	0.035 (0.03)	0.118*** (0.03)	0.090** (0.03)	0.098** (0.03)	0.074* (0.03)	-0.020 (0.01)
Income	0.014 (0.01)	0.016 (0.01)	0.026* (0.01)	0.025* (0.01)	0.079*** (0.01)	0.068*** (0.01)	-0.019** (0.01)
Religion: catholic	0.116 (0.10)	0.126 (0.10)	-0.039 (0.10)	-0.048 (0.10)	0.072 (0.11)	0.101 (0.11)	0.023 (0.05)
Religion: others	-0.054 (0.14)	-0.062 (0.14)	0.302+ (0.16)	0.313* (0.15)	0.250 (0.17)	0.256+ (0.15)	-0.032 (0.07)
Religion: none	-0.118 (0.10)	-0.081 (0.09)	-0.013 (0.11)	0.030 (0.10)	-0.203* (0.10)	-0.152 (0.10)	-0.059 (0.04)
Non-white	0.066 (0.10)	0.028 (0.09)	-0.083 (0.10)	-0.047 (0.10)	0.134 (0.10)	0.239* (0.10)	0.113* (0.05)
PID strength	-0.077+ (0.05)	-0.099* (0.04)	0.159*** (0.05)	0.165*** (0.05)	0.150** (0.05)	0.210*** (0.05)	-0.020 (0.02)
Republican dummy	0.198* (0.08)	0.148* (0.07)	-0.012 (0.08)	-0.024 (0.08)	0.240*** (0.08)	0.161* (0.08)	0.013 (0.04)
Disagreement		0.150* (0.08)		-0.175* (0.08)		-0.207* (0.08)	
Intercept	2.827*** (0.37)	2.797*** (0.37)	1.594*** (0.36)	2.268*** (0.40)	0.019 (0.35)	0.938* (0.41)	2.224*** (0.16)
N	1337	1247	1337	1247	1337	1247	1247
R-square	0.139	0.148	0.194	0.182	0.294	0.262	0.132

\*\*\*p < 0.001, \*\*p < 0.01, \*p < 0.05, +p < 0.10

Second, network disagreement itself is positively related to outparty interaction and negatively to political interest and discussion, which is consistent with what Mutz (2006) and others have found. Third, partisan bonding is negatively related and partisan bridging positively related to network disagreement, suggesting that to some extent the level of disagreement one encounters in the network is influenced by the partisan composition of one's friends.

That bonding, bridging, and disagreement all significantly predict the dependent variables points us to a more important question: How much are the effects of bonding and bridging on outparty attitudes and political engagement due to network disagreement?<sup>6</sup> A mediation analysis is a useful tool to answer this question. Figure 2 presents mediation models for each dependent variable. The path coefficients in these models correspond to regression coefficients in Table 2. From the path coefficients, we can calculate the direct and indirect effects of partisan bonding and bridging on the dependent variables, which are presented in Table 3.

Two patterns are evident. First, partisan bonding and bridging both have statistically significant direct effects on all dependent variables. Second, while partisan bonding has significant indirect effects on the dependent variables, partisan bridging's indirect effects are only significant for political discussion, and only marginally so. This suggests that while one of the ways in which partisan bonding leads to lower outparty interaction and higher political engagement is by decreasing network disagreement (with mediating effects ranging from 12 to 21%) the same cannot be said for partisan bridging.

This is noteworthy as it defies what the previous studies have assumed, but not shown. The assumption shared by many existing studies has been that ties with politically different others improve attitudes toward the outgroup and decrease political engagement because these ties induce disagreement in the network. The mediation analysis, on the other hand, shows that the effects of partisan bridging have little to do with network disagreement. Rather, it is partisan bonding or relationships with politically similar others whose effects are mediated by network disagreement.

## Discussion

This article employs a new measurement of partisan bonding and bridging and, in doing so, offers three contributions to the growing literature on social networks and political behavior. First, I show that partisan bonding and bridging are two different constructs that are only weakly correlated. Second, I show that partisan bonding and bridging are different from network disagreement and that they have different effects on outparty attitudes and political engagement. Partisan bonding

<sup>6</sup> Another, equally important question would be to examine how partisan bonding or bridging interacts with network disagreement. I present this analysis as Table A7 and Figure A1 in the Online Appendix. I find that the effects of disagreement are significant only among individuals with low partisan bridging or bonding. The effects of disagreement are either weaker or not statistically significant among individuals high in bridging or bonding.

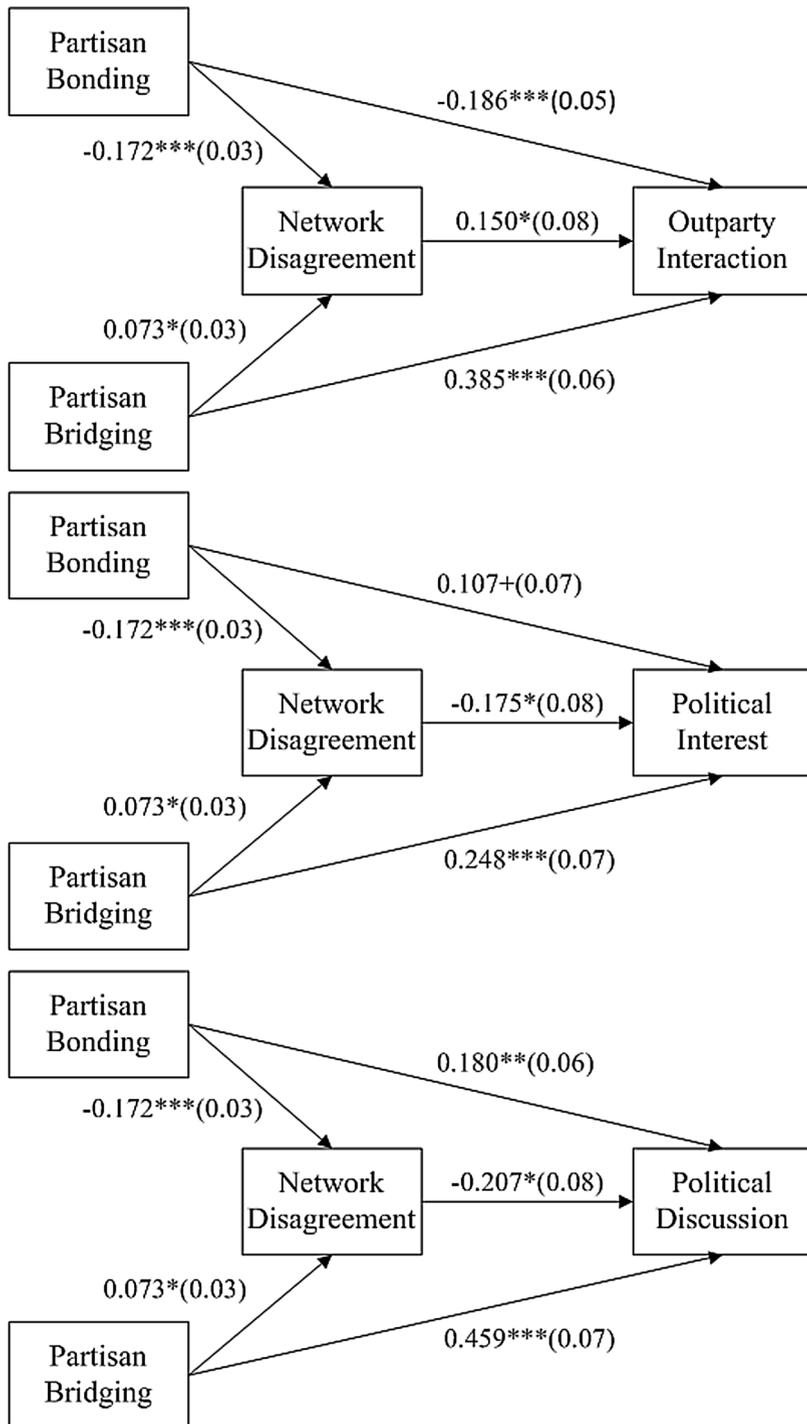


Fig. 2 Mediation models of partisan bonding and bridging and network disagreement

**Table 3** Direct and indirect effects of the mediation models

Dependent variable	Independent variable	Direct effect	Indirect effect	Total effect	Ratio indirect/total (%)
Outparty interaction	Bonding	-0.186*** (0.05)	-0.026 <sup>+</sup> (0.01) (0.05)	-0.212*** (0.05)	12.26
	Bridging	0.385*** (0.06)	0.011 (0.01)	0.396*** (0.06)	2.78
Political interest	Bonding	0.107 <sup>+</sup> (0.06)	0.030* (0.01)	0.137* (0.06)	21.35
	Bridging	0.248*** (0.07)	-0.013 (0.01)	0.235*** (0.07)	5.53
Political discussion	Bonding	0.180** (0.06)	0.036* (0.02)	0.216*** (0.06)	16.67
	Bridging	0.459*** (0.07)	-0.015 <sup>+</sup> (0.01)	0.444*** (0.07)	3.38

\*\*\* $p < 0.001$ , \*\* $p < 0.01$ , \* $p < 0.05$ , <sup>+</sup> $p < 0.10$

A sensitivity analysis for the mediation models is presented in the Online Appendix

is negatively related to outparty attitudes and positively to political engagement; partisan bridging is positively related to both outparty attitudes and political engagement; whereas network disagreement is positively related to outparty attitudes and negatively to political engagement. This suggests that a trade-off between tolerance and political engagement is essentially an illusion and that the efforts to encourage voters to build relationships with politically different others can be done without having to worry that they will lead to decreased engagement. Third, I show that network disagreement partially mediates the effects of partisan bonding on outparty attitudes and political engagement, but not the effects of partisan bridging.

Three implications of the present study on how we should understand the effects of social networks on political behavior are particularly noteworthy. The first concerns the mediating effects of network disagreement. Why does network disagreement mediate the effects of partisan bonding but not the effects of partisan bridging? A look at the mediation models in Fig. 2 reveals that the effect of partisan bridging on network disagreement is weaker than the effect of partisan bonding, suggesting that ties with politically different others are only weakly related to the level of network disagreement. There are three explanations for why this may be the case. The first is attitudes adoption. Individuals may gradually adopt the views of their significant others, even those who are politically different from themselves (Lazer et al. 2010). Such an adoption strategy arguably leads to a lower level of disagreement in the network.

The second explanation concerns attitudes misrepresentation. Disagreements with or negative feelings toward others whom one otherwise likes can cause cognitive discomfort, which demands a resolution (Festinger 1957; Heider 1958). Aside from severing the relationships or changing one's own attitudes to be more aligned with that of one's close others (i.e., an attitudes adoption), another way for an individual to resolve such cognitive dissonance is by, consciously or unconsciously, misinterpreting the others' attitudes so that they do not look as different. As the

significant others are no longer perceived as extremely politically different from one's self, one's perceived network disagreement is also likely decreased.

The third explanation is a simple conflict management. Knowing that one's significant others have different political views may lead one to be more sensitive in choosing political topics to discuss. Staying away from controversial topics, in turn, may reduce the level of network disagreement in the network. These three mechanisms, however, are not perfect in the sense that they may reduce, but not eliminate disagreement (Huckfeldt et al. 2004a, b; see also Fig. 2). Future studies will benefit from exploring how individuals maintain their relationships with politically different others while at the same time keeping an acceptable level of network disagreement.

The second implication of the present study concerns how we can improve the measurements of bonding, bridging, and network disagreement. The strategy employed in the present study to measure bonding and bridging, a global estimate measure, is relatively straightforward. But one can think of other measurement strategies. A particularly fruitful one would be to use multiple name generators to measure bonding and bridging (hereafter, partisan name generators). As opposed to asking respondents to name their contacts and then asking follow-up questions on the characteristics of each of the contacts, the researcher instead asks respondents to list contacts who are Republican, Democrat, or Independent. Obviously, the questions can be tailored to the research question at hand. For example, a study interested in religious bonding and bridging may instead ask respondents to list contacts who share or do not share the respondent's religious affiliation.

Asked this way, bonding and bridging would be measured independently and their effects can be estimated separately. It would be interesting to field a relatively large social network survey that enables researchers to ask at least three contacts from each partisan group and then compare the characteristics of the contacts from each group. What types of people (e.g., in terms of familial relationships, education, or race) are more likely to be listed as inparty contacts? What about outparty contacts?

Similarly, network disagreement can also be measured in relation to the partisan name generators. As opposed to asking respondents how often they disagree with different groups of people as the present study did, the researcher instead asks the respondents how often they disagree with the names elicited in the name generators. This way, there would be multiple measures of network disagreements corresponding to different partisan groups, which then enables the researcher to more explicitly test the extent of which bonding or bridging shapes network disagreement.

The third potential implication concerns political polarization. Studies have documented a growing divide between the two major American parties and their partisans (Abramowitz and Saunders 2008; Layman 2001). At the same time, there is also a tendency for individuals to affiliate themselves with similar others in social networks (McPherson et al. 2001). It would be interesting to employ the aforementioned partisan name generators in a longitudinal study to examine how polarization affects the composition of voters' social networks. If political polarization leads to more politically homogeneous networks, does it happen because people increasingly befriend more inparty identifiers or because they befriend fewer outparty identifiers? A similar study on social networks evolution could be done on the social media

(e.g., Facebook and Twitter), but the results likely would not be representative of the population. Embedding partisan name generators in a nationally representative survey, on the other hand, may lead to more generalizable findings.

In short, I show that our social relationships matter and, when it comes to politics, they affect how we evaluate political groups and our political engagement. Social relationships, however, are a complex matter. How we form ties with politically similar and different others likely cannot be captured with a single measure that assumes the two types of ties are perfect opposites. Future studies will benefit from examining alternative measurements of bonding, bridging, and network disagreement; the strengths and limitations of these measurements; and the effects bonding, bridging, and disagreement properly measured have on political attitudes and behavior.

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